



## **Frequently Asked Questions about Wastewater Aerobic Treatment Units**

### **1. Question. What is an aerobic treatment unit?**

**Answer:** An aerobic treatment unit (ATU) is a major component of many modern day septic systems. The ATU's used in Lake County and throughout most of the state of Illinois are certified to produce Class I effluent. All these units have been tested and certified by the National Sanitation Foundation (NSF) or an approved American National Standards Institute (ANSI) laboratory and found to comply with testing standards for residential wastewater treatment systems. ATU's treat wastewater to a much higher degree than a septic tank and are usually required as a component of a septic system because of poor soils and/or small lots. In an aerobic unit, air supplied by a small air blower or compressor, is mixed with the wastewater. Oxygen provided to bacteria in the wastewater allows for the efficient breakdown and digestion of the waste matter. Although relatively clear and odor free after aeration, the wastewater still contains significant concentrations of nutrients and disease causing organisms. Typical sizes for units for single family homes are 500, 600 and 750 gallons.

### **2. Question. Why does my aerobic treatment unit need servicing two times per year?**

**Answer:** This servicing requirement is implicit in the certification described in #1 above and as such is required by the Illinois Department of Public Health and the Lake County Health Department. The servicing must be performed at least once every 6 months. A good way to remember this is to make sure servicing occurs at least once between January and June, and once between July and December. There must be at least 4 months between servicing dates.

### **3. Question. What happens if the servicing is not performed?**

**Answer:** The Department must check that the required maintenance is performed. Notices are sent to owners to remind them. This is a service to the community as a whole helping to ensure systems are maintained and operating properly.

### **4. Question. Will my septic system be harmed in any way if the servicing is not done?**

**Answer:** In the vast majorities of cases, allowances have been built into the design of the septic system because an ATU is part of the system. The system design in turn is dependent on the proper operation of the ATU (operating as tested and certified) so if servicing is not performed, the ATU may not be operating as certified and therefore the septic system is not operating as designed. It is a very common practice to reduce the size of the septic field when an ATU is used and if the ATU isn't working as it's supposed to, the septic field could be getting overloaded.

**5. Question. What type of aerobic unit do I have?**

**Answer:** If you do not know the brand of aerobic unit you have, you can find out by calling the system installer, looking for the brand name on the unit itself or calling the Health Department at 847-377-8020.

**6. Question. What are the service providers supposed to be checking?**

**Answer:** This is specific to the brand of aerobic unit and is stated in the service manual for the unit. It is important that mechanical components in the ATU receive regular inspection and maintenance. Some units have filters that filter the wastewater so these will need cleaning or changing. Some compressors may have filters that need changing. Below is a list of items that may be routinely checked.

- Check that the compressor is working satisfactorily.
- Test the working condition of the alarm.
- Check timers and control panels, if applicable.
- Clean/replace any filters or media.
- Check the level of solids in the aerator, trash/septic tank and recommend pumping if necessary.
- Scoop out a sample of the effluent for a visual and odor inspection.
- Check the electrical connections/wiring for overall dependability and safety condition.
- Ensure lids are properly fastened.
- Check the unit for damage and recommend repairs.
- Check the disinfection unit if applicable.